**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 1-22 without prejudice or disclaimer.

Please add new claims 23-47 as follows.

**Listing of Claims:**

Claims 1-22: (canceled)

23. (new) A micropipette, comprising:

a pipette main body;

a sample inlet port through which a sample is supplied into said pipette main body;

a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored;

a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port; and

a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a

predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port.

24. (new) A micropipette, comprising:

a pipette main body;

a sample inlet port through which a sample is supplied into said pipette main body;

a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored;

a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, has an approximately circular shape which extends a first predetermined distance from said first end of said sample ejection port toward said second end of said sample ejection port, and another cross-section of said sample ejection port, when viewed in said plane, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, said projections extending from said first predetermined distance toward said second end of said sample ejection port, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port; and

a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port.

25. (new) A micropipette according to claim 23, wherein an angle between straight lines determined by connecting apexes of adjacent projections to said center axis of said sample ejection port is 1 degree to 120 degrees.

26. (new) A micropipette according to claim 23, wherein a total length (L1) of the circumference of said cross-section of said ejection port including said at least three projections is more than 1.1 times larger than a length (L2) of the circumference of a circle having the same area as said cross-section of said ejection port.

27. (new) A micropipette according to claim 23, wherein a rate of the gradual decrease in said cross-sectional area of said sample ejection port is continuous from said first end of said sample ejection port to a predetermined distance toward said second end of said sample ejection port, and is greater than a rate of continuous decrease in the cross-sectional area from said predetermined distance to said second end of said sample ejection port.

28. (new) A micropipette according to claim 23, wherein a surface roughness of said inner surface of said sample ejection port is greater than a surface roughness of a surface of said cavity through which said first end of said sample ejection port is formed.

29. (new) A micropipette according to claim 23, wherein said second end of said sample ejection port comprises a sample discharge opening and a surface proximate said second end of said sample ejection port is treated with a liquid repellent.

30. (new) A micropipette according to claim 23, wherein at least a portion of said pipette main body where said cavity and said piezoelectric/electrostrictive element are disposed is formed from zirconia ceramics.

31. (new) A micropipette according to claim 30, wherein said pipette main body formed from zirconia ceramics is produced by laminating and sintering green sheets.

32. (new) A micropipette according to claim 23, wherein said pipette main body is formed from a resin at least at a portion where said sample ejection port is formed.

33. (new) A micropipette according to claim 23, wherein said piezoelectric/electrostrictive element comprises piezoelectric/electrostrictive layers including at least one lead compound selected from the group consisting of lead zirconate, lead titanate and lead magnesium niobate as a main component.

34. (new) A micropipette according to claim 23, wherein said pipette main body further comprises a plurality of sample inlet ports, a plurality of cavities and a plurality of sample ejection ports.

35. (new) A micropipette according to claim 23, wherein said cavity and said piezoelectric/electrostrictive element are disposed in a first pipette unit, and a plurality of said sample inlet ports and a plurality of said sample ejection ports are disposed in a second pipette unit, and a plurality of said first and second pipette units are bonded to one another to form said pipette main body.

36. (new) A micropipette according to claim 23, wherein said pipette main body comprises a flat plate including an upper surface, a lower surface and side surfaces, and said sample ejection port is disposed on one of said side surfaces, said upper surface and said lower surface.

37. (new) A micropipette according to claim 23, wherein said pipette main body comprises a flat plate including an upper surface, a lower surface and side surfaces, said sample ejection port and said sample inlet port each being disposed on one of said upper, lower and side surfaces such that said sample ejection port and said sample inlet port are disposed on different surfaces of said pipette main body.

38. (new) A micropipette according to claim 23, wherein a plurality of said sample inlet ports are in communication with said cavity.

39. (new) A micropipette composite unit, comprising:

a plurality of micropipettes bonded to one another and selected from the group consisting of micropipettes (i) and (ii), wherein

micropipette (i) comprises a pipette main body comprising (a) a sample inlet port through which a sample is supplied into said pipette main body, (b) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (c) a nozzle portion including a sample ejection port in communication with said cavity, the sample ejection port having an inner surface and first and second ends opposite to one another, said sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (d) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample

stored in said cavity to be discharged from said sample ejection port, and

micropipette (ii) comprises a pipette main body including (a) a sample inlet port through which a sample is supplied into said pipette main body, (b) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (c) a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port has an approximately circular shape extending a first predetermined distance from said first end of said sample ejection port toward said second end of said sample ejection port, and another cross-section of said sample ejection port, when viewed in said plane, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, said projections extending from said first predetermined distance toward said second end of said sample ejection port, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (d) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port.

40. (new) A dispenser, comprising:

an array of micropipette composite units each comprising a plurality of micropipettes bonded to one another, said array of micropipette composite units including sample ejection ports disposed in the form of a matrix, with the same or different types of liquid samples being ejected from said sample ejection ports, and

said micropipettes in said micropipette composite units being selected from the group consisting of micropipettes (i) and (ii), wherein

micropipette (i) comprises a pipette main body comprising (a) a sample inlet port through which a sample is supplied into said pipette main body, (b) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (c) a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (d) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port, and

micropipette (ii) comprises a pipette main body including (a) a sample inlet port through which a sample is supplied into said pipette main body, (b) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (c) a nozzle portion including a sample ejection port in communication with said cavity and having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, has an approximately circular shape extending a first predetermined distance from said first end of said sample ejection port toward said

second end of said sample ejection port, and another cross-section of said sample ejection port, when viewed in said plane, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, said projections extending from said first predetermined distance toward said second end of said sample ejection port, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (d) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port.

41. (new) A dispenser according to claim 40, further comprising a first cartridge including liquid samples stored therein, said first cartridge being disposed to face said sample inlet ports.

42. (new) A dispenser according to claim 40, further comprising a second cartridge including one of an aqueous solvent and an organic solvent stored therein, and being disposed to face said sample inlet ports, wherein connecting spaces formed from said sample inlet ports to said sample ejection ports are cleaned with said one of said aqueous solvent and said organic solvent.

43. (new) A dispenser according to claim 40, further comprising a thin plate for rejecting droplets flying in a deviated direction is disposed to face the said sample ejection ports in said pipette main body, said thin plate having openings with centers coaxially aligned in a direction of the center axes of said sample ejection ports.

44. (new) A method of producing a biochip, comprising:

providing a micropipette comprising (a) a pipette main body, (b) a sample inlet port through which a sample is supplied into said pipette main body, (c) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (d) a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (e) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port; and

ejecting a sample solution from said micropipette to form said biochip comprising at least one sample spot on a base plate.

45. (new) A method of producing a biochip, comprising:

providing a micropipette comprising (a) a pipette main body, (b) a sample inlet port through which a sample is supplied into said pipette main body, (c) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (d) a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a

cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, has an approximately circular shape which extends a first predetermined distance from said first end of said sample ejection port toward said second end of said sample ejection port, and another cross-section of said sample ejection port, when viewed in said plane, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, said projections extending from said first predetermined distance toward said second end of said sample ejection port, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (e) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port; and

ejecting a sample solution from said micropipette to form said biochip comprising at least one sample spot on a base plate.

46. (new) A method of producing a biochip, comprising:

providing a micropipette composite unit comprising a plurality of micropipettes bonded to one another and selected from the group consisting of micropipettes (i) and (ii), wherein

micropipette (i) comprises a pipette main body comprising (a) a sample inlet port through which a sample is supplied into said pipette main body, (b) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (c) a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a

cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (d) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be discharged from said sample ejection port, and

micropipette (ii) comprises a pipette main body including (a) a sample inlet port through which a sample is supplied into said pipette main body, (b) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (c) a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in said plane perpendicular to a center axis of said sample ejection port, has an approximately circular shape extending a first predetermined distance from said first end of said sample ejection port toward said second end of said sample ejection port, and another cross-section of said sample ejection port, when viewed in said plane, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, said projections extending from said first predetermined distance toward said second end of said sample ejection port, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (d) a piezoelectric/electrostrictive element

mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port; and

ejecting a sample solution from said micropipette to form said biochip comprising at least one sample spot on a base plate.

47. (new) A method of producing a biochip, comprising:

providing a dispenser comprising an array of micropipette composite units each comprising a plurality of micropipettes bonded to one another, said array of micropipette composite units including sample ejection ports disposed in the form of a matrix, with the same or different types of liquid samples being ejected from said sample ejection ports, and said micropipettes in said micropipette composite units being selected from the group consisting of micropipettes (i) and (ii), wherein

micropipette (i) comprises a pipette main body comprising (a) a sample inlet port through which a sample is supplied into said pipette main body, (b) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (c) a nozzle portion including a sample ejection port in communication with said cavity, said sample ejection port having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (d) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element

changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port, and

micropipette (ii) comprises a pipette main body including (a) a sample inlet port through which a sample is supplied into said pipette main body, (b) a cavity in communication with said sample inlet port, into which the sample is received and temporarily stored, (c) a nozzle portion including a sample ejection port in communication with said cavity and having an inner surface and first and second ends opposite to one another, the sample being discharged from said cavity and out of said pipette main body through said sample ejection port, wherein a cross-section of said sample ejection port, when viewed in a plane perpendicular to a center axis of said sample ejection port has an approximately circular shape extending a first predetermined distance from said first end of said sample ejection port toward said second end of said sample ejection port, and another cross-section of said sample ejection port, when viewed in said plane, includes at least three projections extending radially away from said center axis, wherein each projection is defined by two adjacent surfaces that are either (1) linear and define at least one of at least one acute angle and at least one obtuse angle, or (2) curved, said projections extending from said first predetermined distance toward said second end of said sample ejection port, and wherein a cross-sectional area of said sample ejection port gradually decreases from said first end of said sample ejection port toward said second end of said sample ejection port, and (d) a piezoelectric/electrostrictive element mounted on an outer surface of said pipette main body above said cavity, the activation of said piezoelectric/electrostrictive element changing the volume of said cavity to cause a predetermined amount of the sample stored in said cavity to be ejected from said sample ejection port; and

ejecting a sample solution from said micropipette to form said biochip comprising at least one sample spot on a base plate.